

217/785-5151

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

American Flange & Manufacturing Co., Inc.
Attn: Joseph C. Kashickey
290 East Fullerton Avenue
Carol Stream, Illinois 60188-0688

<u>Application No.:</u> 73040932	<u>I.D. No.:</u> 043020ABE
<u>Applicant's Designation:</u>	<u>Date Received:</u> December 19, 2000
<u>Subject:</u> Electroplating and Coating	
<u>Date Issued:</u> October 17, 2001	<u>Expiration Date:</u> October 17, 2006
<u>Location:</u> 290 East Fullerton Avenue, Carol Stream	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 4 lacquer coating lines (8 spraybooths with dry filters and 8 electric ovens), 3 cap seal coating lines (6 coaters with 3 ovens), 1 zinc plating line, 2 oil storage tanks, electrolytic zinc plating boiler, 1 paint burnoff oven, 3 air make-up units, 18 plant heating units, waste-water treatment and waste-solids dryer pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/yr for volatile organic material (VOM), 10 tons/yr for a single hazardous air pollutant (HAP), and 25 tons/yr for all HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits for this location.
2. Pursuant to 35 Ill. Adm. Code 218.204(j)(1), the coatings applied on the lacquer coating lines and the cap seal coating lines shall not exceed 4.3 lb VOM/gal of coating (minus water and any compounds which are exempted from the definition of VOM) as applied at each applicator.
- 3a. VOM emissions from the lacquer coating lines shall not exceed 22.9 tons/yr. These limits are based upon maximum material usage, VOM content, and a material balance calculation.

- b. Compliance with this annual limit shall be determined on a daily basis from the sum of the data from the current day plus the preceding 364 days (i.e., a running total of 365 days of data) where the daily emissions are calculated using the following formula:

$$E_d = \sum_{i=1}^n V_i C_i$$

Where:

E_d = Actual VOM emissions for the day (lbs/day);

I = Subscript denoting a specific coating applied or cleanup solvent used;

n = Total number of coatings as applied and cleanup solvents used in all lacquer lines at the source;

V_i = Volume of each coating as applied or cleanup solvent used for the day (gal/day) minus water and any compounds which are specifically exempted from the definition of VOM;

C_i = The VOM content of each coating as applied or cleanup solvent used (lbs VOM/gal) minus water and any compounds which are specifically exempted from the definition of VOM.

- 4a. This permit is issued based on negligible emissions of volatile organic material from the cap seal coating lines and electroplating line. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year from each emission unit.
- b. This permit is issued based on negligible emissions of volatile organic material from 2 oil storage tanks, waste-water treatment and waste-solids dryer. For this purpose emissions from all such sources shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
5. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of HAPs from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA.
- 6a. Natural gas shall be the only fuel fired in the 3 cap seal ovens, electrolytic zinc plating boiler, paint burnoff oven, 3 air make-up units, 18 plant heating units, and any other fuel combustion unit.
- b. Total natural gas usage and emissions from the 3 cap seal ovens, electrolytic zinc plating boiler oven, paint burnoff oven, 3 air make-

up units, 18 plant heating units, and any other fuel combustion unit shall not exceed the following limits:

Natural Gas Usage		NO _x Emissions		VOM Emissions	
(Therms/Mo)	(Therms/Yr)	(Lb/Mo)	(Tons/Yr)	(Lb/Mo)	(Tons/Yr)
205,000	2,460,000	2,050	12.3	113	0.68

These limits are based upon the maximum total natural gas usage and standard emission factors (100 lb NO_x/million scf, 5.5 lb VOM/million scf). Conversion factors used were 1,000 Btu/scf, 1 Therm/100,000 Btu, and 2000 lb/ton.

- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data from the previous month plus the preceding 11 months (i.e., a 12 month running total).
- 7. This permit is based upon negligible emissions of particulate matter from the 2 oil storage tanks, waste-water treatment, and waste-solids dryer. For this purpose emissions shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr from each emission unit.
- 8a. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to the paint burnoff oven.
- b. The afterburner for the paint burnoff oven shall be heated to an operating temperature of 1400°F before charging and this temperature shall be maintained during this operation.
- c. The afterburner combustion chamber for the paint burnoff oven shall be equipped with an afterburner temperature indicator.
- 9a. The Permittee shall maintain records of the following items for the lacquer coating lines.
 - i. Name and identification number of each coating as applied or cleanup solvent used each day on each coating line.
 - ii. Volume of each coating as applied or cleanup solvent used for the day (gallon/day) minus water and any compounds which are specifically exempted from the definition of VOM.
 - iii. The VOM and HAP content of each coating as applied or cleanup solvent used (lbs VOM/gallon) minus water and any compounds which are specifically exempted from the definition of VOM.
 - iv. VOM Emissions (lb/day and tons/year).
 - v. HAP Emissions (tons/month and tons/year).
 - vi. Natural Gas Usage (therm/month and therm/year).

- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
- 10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, a description of the exceedances or violation, and efforts to reduce emissions and future occurrences.
- 11. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016
- 12. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. Name and identification number of each coating as applied or cleanup solvent used each day on each coating line.
 - b. Volume of each coating as applied or cleanup solvent used for the day (gallon/day) minus water and any compounds which are specifically exempted from the definition of VOM.
 - c. The VOM and HAP content of each coating as applied or cleanup solvent used (lbs VOM/gallon) minus water and any compounds which are specifically exempted from the definition of VOM.
 - d. VOM emissions (lb/day and tons/year).

e. HAP emissions (tons/month and tons/year).

f. Total natural gas usage (therms/month and therms/year).

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

Please note that this permit is revised to no longer include one oven. Also, note that the welding operations are exempt by 35 Ill. Adm. Code 201.146(y).

If you have any questions on this permit, please call John Blazis at 217/782-2113.

Donald E. Sutton, P. E.
Manager, Permit Section
Division of Air Pollution Control

DES:JPB:psj

cc: IEPA, FOS Region 1
IEPA, Compliance Unit
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emission of the electroplating and coating plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the plant. This is a maximum VOM emissions from the lacquer coating lines, cap seal coating lines, and electroplating line and the use of 2,460,000 therms of natural gas for the cap seal ovens, boiler, oven, paint burnoff oven, air make-up units and the plant heating units. The resulting maximum emissions are below the threshold levels (e.g., 25 tons/yr for VOM, 10 tons/yr for a single HAP, 25 tons/yr for all HAPs, and 100 tons/yr for NO_x) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that VOM, HAP and natural gas usage is less than that allowed in this permit.

- 1a. VOM emissions from the lacquer coating lines shall not exceed 22.9 tons/year.

These limits are based upon maximum material usage, VOM content, and a material balance calculation.

- b. This permit is issued based on negligible emissions of volatile organic material from the cap seal coating lines and electroplating line. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year from each emission unit.
- c. This permit is issued based on negligible emissions of volatile organic material from 2 oil storage tanks, waste-water treatment and waste-solids dryer. For this purpose emissions from all such sources shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- d. Total natural gas usage and nitrogen oxides (NO_x) emissions from the 3 cap seal ovens, electrolytic zinc plating boiler, oven, paint burnoff oven, 3 air make-up units, and 18 plant heating units shall not exceed the following limits:

Natural Gas Usage		NO _x Emissions		VOM Emissions	
(Therms/Mo)	(Therms/Yr)	(Lb/Mo)	(Tons/Yr)	(Lb/Mo)	(Tons/Yr)
205,000	2,460,000	2,050	12.3	113	0.68

These limits are based upon the maximum total natural gas usage and standard emission factors (100 lb NO_x/million scf, 5.5 lb VOM/million scf). Conversion factors used were 1,000 Btu/scf, 1 Therm/100,000 Btu, and 2000 lb/ton.

2. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the

Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of HAPs from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA.

3. This permit is based upon negligible emissions of particulate matter from the 2 oil storage tanks, waste-water treatment, and waste-solids dryer. For this purpose emissions shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/yr from each emission unit.

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